

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **2004-204058**

(43)Date of publication of application : **22.07.2004**

(51)Int.Cl.

C08F297/08
C08F 4/645

(21)Application number : **2002-375071**

(71)Applicant : **mitsui chemicals inc**

(22)Date of filing : **25.12.2002**

(72)Inventor : **MATSUKI TOMOAKI**

KIZU KOICHI

KOJO SHINICHI

MORI RYOJI

FUJITA TERUNORI

KASHIWA NORIO

(54) **OLEFIN-BASED BLOCK COPOLYMER**

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a new block copolymer i.e., a modification material for maintaining balanced properties in rigidity and impulsive resistance at a high level, wherein a polyethylene-based segment with a high melting point and an elastomer segment with Tg of not higher than -50°C are bonded.

SOLUTION: The olefin-based block copolymer is a copolymer of ethylene and a 3-20C α -olefin and shows a peak ascribable to a $\beta\beta$ methylene in its ¹³C-NMR spectrum. The copolymer also exhibits a glass transition temperature(Tg) of not higher than -50°C measured by differential scanning calorimetry (DSC), a heat absorption peak ascribable to the melting point (Tm) at a temperature not lower than 105°C, a melting heat not lower than 20 J/g estimated from the melting peak area, a density of not less than 0.870 g/cm³, and a melt flow rate in the range of 0.3-50 g/10 minutes at 190°C under 2.16 kg loading.